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EXAMINER	
DANIELSEN, NATHAN ANDREW	
ART UNIT	PAPER NUMBER
2627	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/645,566	JEON ET AL.	
	Examiner	Art Unit	
	Nathan Danielsen	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-10,12-19,21-25 and 35-61* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-10,12-19,21-25 and 35-61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *07/03/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-5, 7-10, 12-19, 21-25 and 35-61 are pending. Claims 26-34 have been canceled in Applicant's preliminary amendment filed 03 December 2004. Claims 50-61 have been added in applicant's amendment filed 18 October 2007.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant's specification fails to provide proper basis for sync information preceding each data unit *and* additional sync information being byte 0 of each five-byte data and parity row.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-4, 8, 10, 13, 16, 18, 19, 24, 25, 36-41, 46-54, and 56-60 are rejected under 35 U.S.C. 103(a) as being obvious over Watanabe et al (International Published Application WO 02/086873 and English equivalent US Patent Application Publication 2004/0156294; hereinafter Watanabe), in view of Senshu (US Patent Application Publication 2002/0060968).

Regarding claims 1, 3, 18, and 38, Watanabe discloses a high-density recording medium (and associated methods of recording or reproducing) including one or more recording layers, the recording medium comprising:

a lead-in area including a disc information required for recording or reproducing data on or from the recording medium (¶ 168 and elements 21 and 22 figure 18); and

a burst cutting area located at an inner area other than the lead-in area, the burst cutting area including a plurality of data units (¶s 167-175, specifically ¶ 168, and element 11 in figure 18; where the plurality of data units are located on different layers);

wherein the disc information is included in at least one of the data, the disc information includes at least medium type information that identifies a type of recording layer in the recording medium (¶s 78 and 168).

However, Watanabe fails to disclose where each data unit consists of data of 4 rows including a sync field of 1 byte and an information field of 4 bytes, and parity of 4 rows including a sync field of 1 byte and a carrier field of 4 bytes.

In the same field of endeavor, Senshu discloses where each data unit consists of data of 4 rows including a sync field of 1 byte and an information field of 4 bytes, and parity of 4 rows including a sync field of 1 byte and a carrier field of 4 bytes (¶ 5 and figure 2; where the ECC rows are seen to be equivalent to applicant's claimed parity rows).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the recording medium of Watanabe with the data format of Senshu, for the purpose of preventing illegal copying of data (¶ 2).

Regarding claims 50 and 56, Watanabe discloses an apparatus for recording or reproducing data on or from a high-density recording medium including one or more recording layers, the apparatus comprising:

an optical pickup (element 508 in figure 3); and

a video disk recording system operatively connected to the optical pickup configured to identify disc information recorded in a burst cutting area and lead-in area of the recording

medium, the information including at least a medium type information that identifies a type of recording layer in the recording medium (¶s 2, 78, and 167-175, figures 3 and 18); and

control a data recording or reproducing operation, based on the identified information wherein the burst cutting area includes a plurality of data units, the disc information being included in at least one of the data units (¶s 78 and 168),

wherein the apparatus identifies the disc information by processing at least one of the data units (¶ 78).

However, Watanabe fails to disclose where each data unit consists of data of 4 rows including a sync field of 1 byte and an information field of 4 bytes, and parity of 4 rows including a sync field of 1 byte and a carrier field of 4 bytes.

In the same field of endeavor, Senshu discloses where each data unit consists of data of 4 rows including a sync field of 1 byte and an information field of 4 bytes, and parity of 4 rows including a sync field of 1 byte and a carrier field of 4 bytes (¶ 5 and figure 2; where the ECC rows are seen to be equivalent to applicant's claimed parity rows).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the recording medium of Watanabe with the data format of Senshu, for the purpose of preventing illegal copying of data (¶ 2).

Regarding claim 2, Watanabe, in view of Senshu, discloses everything claimed, as applied to claim 1. Additionally, Watanabe discloses where the medium type information indicates that the recording medium is a writable medium or read-only medium (¶ 78).

Regarding claim 4, Watanabe, in view of Senshu, discloses everything claimed, as applied to claim 3. Additionally, Watanabe discloses where the disc information field is recorded in a first data unit (figure 18).

Regarding claims 8, 19, 40, 51, and 57, Watanabe, in view of Senshu, discloses everything claimed, as applied to claims 1, 18, 38, 50, and 56. Additionally, Watanabe discloses where the disc information further includes layer information (¶s 78 and 168).

Regarding claims 10, 52, and 58, Watanabe, in view of Senshu, discloses everything claimed, as applied to claims 8, 51, and 57. Additionally, Watanabe discloses where layer information represents the number of layers included in the recording medium (¶ 168).

Regarding claims 13, 54, and 60, Watanabe, in view of Senshu, discloses everything claimed, as applied to claims 1, 50, and 56. Additionally, Watanabe discloses where the disc information includes a reflectivity information, the reflectivity information indicating the reflectivity of the recording medium (¶ 78; where it is well known that read-only, writable, and rewritable layers have significantly differing reflectivities).

Regarding claims 16 and 39, Watanabe, in view of Senshu, discloses everything claimed, as applied to claims 1 and 38. Additionally, Watanabe discloses where the medium type information is included in at least one information byte (inherent in ¶ 78).

Regarding claims 24 and 46, Watanabe, in view of Senshu, discloses everything claimed, as applied to claims 18 and 38. Additionally, Watanabe discloses where the identifying and reading steps identify/read the information preferentially when the recording medium is loaded in a recording or reproducing apparatus (figure 20).

Regarding claims 25, 37, 47, and 48, Watanabe, in view of Senshu, discloses everything claimed, as applied to claims 18 and 38. Additionally, Watanabe discloses where the identifying step identifies the information in an early stage of recording or reproducing data on or from the recording medium and at an early stage of a drive start-up procedure (figure 20).

Regarding claims 36 and 49, Watanabe, in view of Senshu, discloses everything claimed, as applied to claims 18 and 38. Additionally, Watanabe discloses where the control information in said lead-in area includes the disc information in the burst cutting area (suggested by ¶s 168 and 169).

Regarding claim 41, Watanabe, in view of Senshu, discloses everything claimed, as applied to claim 38. Additionally, Watanabe discloses processing the read information included in at least one data unit to identify the information (inherent in ¶ 78 and 168 when the various kinds of disclosed information is recorded in the BCA).

Regarding claims 53 and 59, Watanabe, in view of Senshu, discloses everything claimed, as applied to claims 52 and 58. Additionally, Watanabe discloses where the disc information further includes an application indicator to indicate a use for a copy protection system (¶ 78).

6. Claims 5, 21, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe, in view of Senshu, and further in view of Ueda et al (US Patent Application Publication 2001/0007545; hereinafter Ueda).

Regarding claims 5 and 21, Watanabe, in view of Senshu, discloses everything claimed, as applied to claim 1 and 18. However, Watanabe, in view of Senshu, fails to disclose where the disc information is repeatedly recorded in each data unit.

In the same field of endeavor, Ueda discloses where the disc information is repeatedly recorded in each data unit (suggested by ¶ 58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have redundantly stored information in a lead-in are and the BCA, as taught by Ueda, for the purpose of preventing illegal regional information reinitialization (¶ 58).

Regarding claim 42, Watanabe, in view of Senshu, discloses everything claimed, as applied to claim 41. However, Watanabe, in view of Senshu, fails to disclose where the disc information is repeatedly included in each data unit and where the processing step processes data included in each data unit to identify the disc information.

In the same field of endeavor, Ueda discloses where the disc information is repeatedly recorded in each data unit (suggested by ¶ 58) and where the processing step processes the read information included in each data unit to identify the information (figure 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have redundantly stored information in a lead-in are and the BCA, as taught by Ueda, for the purpose of preventing illegal regional information reinitialization (¶ 58).

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe, in view of Senshu, and further in view of Dieleman et al (US Patent 5,341,356; hereinafter Dieleman).

Regarding claim 7, Watanabe, in view of Senshu, discloses everything claimed, as applied to claim 6. However, Watanabe, in view of Senshu, fails to disclose where the lead-out area contains control information.

In the same field of endeavor, Dieleman discloses where the lead-out area contains control information (abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included control information in a lead-out area, as taught by Dieleman, for the purpose of controlling reading of the information in all of the recorded information volumes (abstract).

8. Claims 9, 12, 35, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe, in view of Senshu, and further in view of applicant's admitted prior art (hereinafter the AAPA).

Regarding claims 9, 35, and 45, Watanabe, in view of Senshu, discloses everything claimed, as applied to claims 8, 18, and 38. However, Watanabe, in view of Senshu, fails to disclose where the disc information further includes a sequence number to identify a data unit.

In the same field of endeavor, the AAPA discloses where the disc information further includes a sequence number to identify a data unit (3-byte sector number information in page 2, line 4 and figure 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included layer information in the disc information, for the purpose of identifying the sector which is the currently being recorded/reproduced (page 2, lines 2-4) thereby to make the disk with easier access and control.

Regarding claims 12, Watanabe, in view of Senshu and the AAPA, discloses everything claimed, as applied to claim 9. Additionally, Watanabe discloses where the disc information further includes an application indicator to indicate a use for a copy protection system (¶ 78).

9. Claims 14, 23, 44, 55, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe, in view of Senshu, and further in view of Haneji (US Patent 5,124,962).

Regarding claims 14, 23, 44, 55, and 61, Watanabe, in view of Senshu, discloses everything claimed, as applied to claims 13, 18, 38, 54, and 60. However, Watanabe, in view of Senshu, fails to disclose a reflectivity information.

In the same field of endeavor, Haneji discloses where the disc information includes a reflectivity information, the reflectivity information indicating the reflectivity of the recording medium (col. 2, lines 6-16), where the reflectivity information is required for an optical power control or an automatic gain control when a data recording or reproducing operation is carried out (col. 2, lines 6-26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used control information to indicate the reflectivity of a recording medium, as taught by Haneji, for the purpose of setting drive conditions of an optical disk (col. 2, lines 3-5).

10. Claims 15, 17, 22, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe, in view of Senshu, and further in view of Vining et al (US Patent 6,377,526; hereinafter Vining).

Regarding claims 15, 22, and 43, Watanabe, in view of Senshu, discloses everything claimed, as applied to claims 1, 18, and 38. However, Watanabe, in view of Senshu, fails to disclose where the medium type information represents the type of a BD-ROM (BD-Read Only memory), a BD-R (BD-Recordable), or BD-RE (BD-Rewritable).

In the same field of endeavor, Vining discloses where one byte is dedicated to identifying the type of disk the control data has been recorded on (col. 5, lines 37-48).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used different bit/byte values in control data to indicate medium type information, as taught by Vining, for the purposes of determining the type of medium in the drive as well as to provide support and expansion capabilities for new types of media (col. 5, lines 37-48).

Regarding claim 17, Watanabe, in view of Senshu, discloses everything claimed, as applied to claim 16. However, Watanabe, in view of Senshu, fails to disclose where the medium type information is included in the first information byte in each data unit.

In the same field of endeavor, Vining discloses a byte for indicating the medium type (figure 4). However, this byte in Vining is not the first byte of the data unit shown in figure 4. Therefore, absent criticality for including medium type information in the first information byte in each data unit, locating this information in this byte is considered to be an arrangement of data. Where certain types of descriptive material, such as arrangements or compilations of facts or data, are stored so as to be read or outputted by a computer without creating any functional interrelationship, either as part of the stored data or as part of the computing processes performed by the computer, then such descriptive material alone does not impart functionality either to the data as so structured, or to the computer. Furthermore, Haneji suggests that the exact location of this data within the plurality of data units, and thus within the BCA (PEP) area, is irrelevant as long as this data is located somewhere within the data units and is therefore reproduced prior to reproducing data from any other location on the recording medium (col. 1, lines 25-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included medium type information in at least one information byte of a plurality of control data bytes, as taught by Vining, for the purpose of identifying the type of medium in the drive (col. 5, lines 37-48). Furthermore, absent criticality for including medium type information in the first information byte in each data unit, locating this information in this particular location is considered to be a mere arrangement of data and is thus considered to be an obvious matter of design choice.

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1, 5, 18, 21, 38, 50, and 56 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 41, and 42 of copending Application No. 10/787,159 in view of Senshu. Although not identical, the claimed methods and apparatuses of the instant application are rendered obvious over the claims of 10/787,159 because one skilled in the art would have known that the recording medium of 10/787,159 would inherently require a specific method/apparatus to record data on or reproduce data from said recording medium.

Regarding claims 1, 18, 38, 50, and 56, 10/787,159 claims a recording medium having a lead-in area and a BCA having 16 [bytes of] information data and 16 [bytes of] parity data, yet does not claim the exact arrangement of this data (claim 1).

In the same field of endeavor, Senshu discloses the exact arrangement of this data, as shown in the preceding art rejection of claim 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the claimed invention of 10/787,159, for the same purpose as shown in the preceding rejection of art claim 1.

Regarding claims 5 and 21, 10/787,159, in view of Senshu, claims everything, as applied to claims 1 and 18. Additionally, 10/787,159 claims the repeated storage of data in each data unit (claim 5).

13. Claims 2-4, 8, 10, 13, 16, 17, 19, 24, 25, 36, 37, 39-42, 46-49, 51-54, and 57-60 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 41, and 42 of copending Application No. 10/787,159 in view of Senshu and Watanabe.

Regarding claims 2-4, 8, 10, 13, 16, 19, 24, 25, 36, 37, 39-41, 46-49, 51-54, and 57-60, 10/787,159 does not claim the details of these claims.

In the same field of endeavor, Senshu and Watanabe disclose these details, as applied above.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the combined recording medium/apparatuses/methods of the claims of 10/787,159 in view of Senshu with the disclosed medium/apparatus/method of Watanabe, for the purpose of copy-protecting the recording medium (¶ 78).

Regarding claim 17, 10/787,159, in view of Senshu and Watanabe, claims everything, as applied to claims 1 and 16. Additionally, 10/787,159 claims where the information is in the first byte of each data unit (suggested by claim 41).

Regarding claim 42, 10/787,159, in view of Senshu and Watanabe, claims everything, as applied to claims 38, 40, and 41. Additionally, 10/787,159 claims the repeated storage of data in each data unit (claim 5) and the processing to identify the information (inherent in claims 1 and 5 because one skilled in the art would have known that the recording medium of 10/787,159 would inherently require a specific method/apparatus to process reproduced information in order to record data on or reproduce data from said recording medium).

14. Claim 7 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 41, and 42 of copending Application No. 10/787,159 in view of Senshu, Watanabe, and Dieleman.

Regarding claim 7, 10/787,159 does not claim the details of this claim.

In the same field of endeavor, the disclosures of Senshu, Watanabe, and Dieleman make up for deficiencies of the claims of 10/787,159.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the claimed invention of 10/787,159 with the disclosed inventions of Senshu, Watanabe, and Dieleman, for the same purpose(s) as shown in the preceding art rejection of claim 7.

15. Claims 9, 12, 35, and 45 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 41, and 42 of copending Application No. 10/787,159 in view of Senshu, Watanabe, and the AAPA.

Regarding claims 9, 12, 35, and 45, 10/787,159 does not claim the details of these claims.

In the same field of endeavor, the disclosures of Senshu, Watanabe, and the AAPA make up for deficiencies of the claims of 10/787,159.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the claimed invention of 10/787,159 with the disclosed inventions of Senshu, Watanabe, and the AAPA, for the same purpose(s) as shown in the preceding art rejection of claims 9, 12, 35, and 45.

16. Claims 14, 23, 44, 55, and 61 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 41, and 42 of copending Application No. 10/787,159 in view of Senshu, Watanabe, and Haneji.

Regarding claims 14, 23, 44, 55, and 61, 10/787,159 does not claim the details of these claims.

In the same field of endeavor, the disclosures of Senshu, Watanabe, and Haneji make up for deficiencies of the claims of 10/787,159.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the claimed invention of 10/787,159 with the disclosed inventions of Senshu, Watanabe, and Haneji, for the same purpose(s) as shown in the preceding art rejection of claims 14, 23, 44, 55, and 61.

17. Claims 15, 22, and 43 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 41, and 42 of copending Application No. 10/787,159 in view of Senshu, Watanabe, and Vining.

Regarding claims 15, 22, and 43, 10/787,159 does not claim the details of these claims.

In the same field of endeavor, the disclosures of Senshu, Watanabe, and Vining make up for deficiencies of the claims of 10/787,159.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the claimed invention of 10/787,159 with the disclosed inventions of Senshu, Watanabe, and Vining, for the same purpose(s) as shown in the preceding art rejection of claims 15, 22, and 43.

These are provisional obviousness-type double patenting rejections.

Response to Arguments

18. Applicant's arguments with respect to the rejection of claims 1, 18, and 38 under 35 U.S.C. § 103(a) have been considered but are moot in view of the new ground(s) of rejection.

Citation of Relevant Prior Art

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Lee (US Patent 6,414,920) discloses a BCA having the same structure as found in Senshu where the ECC bytes are disclosed as "ECC parity" bytes.

Closing Remarks/Comments

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Danielsen whose telephone number is (571) 272-4248. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:00 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nathan Danielsen
01/04/2008

/William Korzuch/
SPE, Art Unit 2627